PHMSA
Regulatory Updates
2015 French Lick, IN Seminar

Agenda

- Advisory Bulletin Updates
- Latest Rule Updates
- IBR Standards
- Regulation Amendments for 2015

List of Advisory Bulletins

- Advisory Bulletins (ADB)
  - ❖ 2014-05
  - ❖ 2014-04
  - ❖ 2014-03
  - ❖ 2014-02
  - ❖ 2014-01

http://www.phmsa.dot.gov/pipeline/regs/advisory-bulletin

ADB – 2014-05

Pipeline Safety: Guidance for Meaningful Metrics

PHMSA has noticed …

- Senior Management responsibilities
  - ❖Addressing deficiencies in the program
  - ❖Certify the IM program
- Root cause analysis reveal:
  - – Management systems and Organizational program deficiencies contribute to pipeline accidents
- Weakness in using Meaningful Metrics

ADB – 2014-05

Pipeline Safety: Guidance for Meaningful Metrics

Overview …

- Operators need an established method to measure program effectiveness
  - ❖IM as a part of QA/QC program
- Liquid: API 1160 “Managing Integrity for Hazardous Liquid Pipelines” provides guidance on evaluating and improving performance.
- Gas Transmission: using guidance from B31.8S-2004

ADB-2014-04

ADB-2014-04

Guidance for Pipeline Flow Reversals, Product Changes and Conversion to Service

- Alert operators of hazardous liquid and gas transmission pipelines of the potential significant impact flow reversals, product changes and conversion to service may have on the integrity of a pipeline

ADB-2014-03

ADB-2014-03

Notification(s) required prior to certain construction-related events.

- Operators to provide the required construction-related notification(s) not later than 60 days.
- Prior to:
- Material purchasing and manufacturing;
- right-of-way acquisition;

ADB-2014-03

Notification(s) required prior to certain construction-related events.

- Operators to provide the required construction-related notification(s) not later than 60 days.
- Prior to:
  - ❖Construction equipment move-in activities;
  - ❖Onsite or offsite fabrications;
  - ❖or right-of-way clearing, grading and ditching.

ADB-2014-03

Notification(s) required prior to certain construction-related events.

PHMSA also strongly encourages operators to provide

- The required notification(s) for the construction of 10 or more miles of a new pipeline for a pipeline that:
  - ❖(1) Did not previously exist;
  - ❖(2) For the replacement of 10 or more contiguous miles of line pipe in an existing pipeline.

ADB-2014-02

ADB-2014-02

- PHMSA is issuing an advisory bulletin to inform all pipeline owners and operators of the deficiencies identified in Enbridge's Marshall, Michigan, Release.

ADB-2014-02

- **Lessons Learned from the Marshall, Michigan, Release.**
  - NTSB identified specific deficiencies in three of Enbridge programs:
    - ❖Integrity Management (IM)
    - ❖Control Center Operations
    - ❖Public Awareness.

ADB-2014-02

Integrity management (IM) – Deficiencies

- The deficiencies were broken down into the three sections below:
  - ❖IM assessment
  - ❖Risk assessment
  - ❖Data integration

ADB-2014-02

- **Control Center Operations**
  - ❖Lead to prolonged release of crude oil.
  - ❖Did not consider objectively how growth in personnel would affect the safe operation of the pipeline system.

ADB-2014-02

- **Control center operations**
  - ❖Inadequate training and faulty leak detection system
  - ❖Not following procedure
  - ❖Poor team performance leading to poor leadership and communication

ADB-2014-02

- **Public awareness.**
  - ❖ Enbridge's PAP failed to effectively inform the affected public, including citizens and emergency response agencies about the location of the pipeline, how to identify a pipeline release and how to report suspected product releases.

ADB-2014-02

Summary

- Pipeline owners and operators are encouraged to review their own IM programs for similar deficiencies and to take corrective action.
- Operators should also consider training their control room staff as teams to recognize and respond to emergencies or unexpected conditions.

ADB-2014-02

Summary

- PHMSA strongly encourages operators to review past and future NTSB recommendations that the NTSB provides to pipeline operators following incident investigations.
- Operators should proactively implement these improvements to their pipeline safety programs

Update on New Rules, Rule Making and Notices

New Rules

- There is a lot going on in the Rule Making Process …
- With several rules coming down the pipeline …

Rule Making Process

Rule Making Process

The following rules are in one of the following stages:

- NPRM
- Final Rule

NPRM

Rule Making Process

NPRM:

- **Safety of On-Shore Hazardous Liquid Pipelines**

❖ NPRM moved past DOT

❖ ANPRM published 10/18/2010

- Expansion of IM requirements beyond HCA's
- Leak detection beyond HCAs
- Repair criteria in HCA and non-HCA areas
- Stress Corrosion Cracking (SCC)
- Piggability of lines
- Reporting requirements for Gathering lines
- Gravity Line exception

Rule Making Process

The following are in the rule making process:

- **Safety of Gas Transmission and Gathering Lines**

❖ NPRM moved past PHMSA

❖ ANPRM Published 8/25/2011

- ❑ Expansion of IM requirements beyond HCA's
- ❑ Repair criteria for both HCA and non-HCA areas
- ❑ Assessment methods
- ❑ Corrosion control
- ❑ Gas gathering

Rule Making Process

The following are in the rule making process:

- **Safety of Gas Transmission and Gathering Lines**

- NPRM moved past PHMSA
- ANPRM Published 8/25/2011
  - Integrity Verification Process
    - Recommendations from NTSB
      - Elimination of the Grandfather clause
      - Minimum pressure test
    - Congressional mandate requiring either pressure testing or alternative equivalent means such as ILI program for pipe not previously tested or for those that have incomplete records to verify their MAOP
    - Other problematic or “legacy” pipe

Rule Making Process

The following are in the rule making process:

- **EFV Expansion beyond Single Family Residences**

❖ NPRM moved past DOT

❖ ANPRM published 11/25/2011

❑ *Rule will propose to require EFVs for:*

- *branched service lines serving more than one single family residence*
- *multi-family residential dwellings*
- *commercial buildings*

Rule Making Process

The following are in the rule making process:

- **Operator Qualification, Cost Recovery and Other Pipeline Safety Proposed Changes**
  - ❖ NPRM moved past PHMSA
    - ❑ This rule will address issues related to:
      - Operator Qualification for new construction
      - Incident Reporting
      - Cost Recovery
      - Renewal process for special permits
      - Other issues to be determined

Rule Making Process

The following are in the rule making process:

- **Plastic Pipe**
  - ❖ Drafting NPRM to address the following plastic pipe topics:
    - ❑ Authorized use of PA12
    - ❑ AGA petition to raise design factor from 0.32 to 0.40 for PE pipe
    - ❑ Enhanced Tracking and traceability
    - ❑ Miscellaneous revisions for PE and PA11 pipelines
    - ❑ Additional provisions for fittings used on plastic pipe

Rule Making Process

The following are in the rule making process:

- **Rupture Detection and Valve Rule**

❖NPRM

- ❑ This rule will establish and define rupture detection and response time metrics including the integration of Automatic Shutoff Valves (ASV) and Remote Control Valve (RCV) placement as necessary, with the objective of improving overall incident response.
- ❑ This rule responds to:

Requirements of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (The Act):

- ❑ Section 4: ASV/RCV or equivalent technology be installed on newly constructed or entirely replaced natural gas and hazardous liquid transmission pipelines 2 years after the act was issued

Rule Making Process

The following are in the rule making process:

- **Rupture Detection and Valve Rule**

❖NPRM

Requirements of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (The Act):

- ❑Section 8: Require operators of hazardous liquid pipeline facilities to use leak detection systems and establish standards for their use.
  - NTSB Recommendation P-11-10 (gas) which requires transmission and distribution operators to equip SCADA systems with tools to assist with recognizing and pinpointing leaks.

FINAL RULE STAGE

Rule Making Process

Standards Update Effective Mar. 6, 2015

- Major Topic
  - Addresses the set of IBR standards throughout PHMSA's part 192, Part 193 and Part 195 code with updated revisions of standards from all standard organization bodies.
  - This NPRM would impact 22 of the 60+ standards that we currently IBR.
  - Per recent statute (Section 24, revised) all IBR standards pertaining to PSR must be available for free to the public. (Most SDOs comply)
    - ANSI IBR portal – ibr.ansi.org

Incorporated By Reference (IBR) Standards 2015

IBR Standards 2015

Two New Standards:

- ***API Recommended Practice 5LT***, "Recommended Practice for Truck Transportation of Line Pipe" (First edition March 1, 2012)
  - Into 192.7, 192.65 (c), 195.3, 195.207 (c)
- ***ASTM D2513-09a,*** "Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing and Fittings" (December 1, 2009)
  - Into 192.7, 192.123 (e), 192.191 (b), 192.283 (a); Item 1, Appendix B to Part 192.

IBR Standards 2015

Current Updated Code Standard Editions:

- ***ANSI/API Specification 5L,*** "Specification for Line Pipe" (45th edition, December 1, 2012)
- ***ANSI/API Specification 6D,*** "Specification for Pipeline Valves" (23rd edition, April 1, 2008) includes Errata 1,2,3,4,5,6 & Addendum 1,2,3
  - Replaces

IBR Standards 2015

Current Updated Code Standard Editions:

- ***API Recommended Practice 5L1***, "Recommended Practice for Railroad Transportation of Line Pipe" (7th edition, September 2009), into 192.7, 192.65 (a) (1), 195.3,
- ***API Recommended Practice 5LW***, "Transportation of Line Pipe on Barges and Marine Vessels" (3rd edition, September 2009), into 192.7, 192.65(b), 195.3, 195.207 (b).
  - Replaces (2nd edition, December 1996)

Regulation Amendments for 2015

Misc. Rulemaking

Miscellaneous Rulemaking Effective Oct. 1, 2015

- Major Topics
  - Performance of post-construction inspections
  - Leak surveys of Type B onshore gas gathering lines
  - Requirements for qualifying plastic pipe joiners
  - Regulation of ethanol
  - The transportation of pipe

Regulation Amendments for 2015 Final Rule

1. Responsibility to Conduct Construction Inspections § § 192.305 and 195.204.
2. Leak Surveys for Type B Gathering Lines § 192.9.
3. Qualifying Plastic Pipe Joiners § 192.285(c)
4. Mill Hydrostatic Tests for Pipe To Operate at Alternative Maximum Allowable Operation Pressure § 192.112
5. Regulating the Transportation of Ethanol by Pipeline § 195.2

Regulation Amendments for 2015 Final Rule

6. Limitation of Indirect Costs in State Grants.
7. Transportation of Pipe.
8. Threading Copper Pipe.
9. Offshore Pipeline Condition Reports.
10. Calculating Pressure Reductions for Hazardous Liquid Pipeline Integrity Anomalies.
11. Testing Components other than Pipe Installed in Low-Pressure Gas Pipelines.

Regulation Amendments for 2015 Final Rule

12. Alternative MAOP Notifications.
13. National Pipeline Mapping System.
14. Welders vs. Welding Operators.
15. Components Fabricated by Welding.
16. Odorization of Gas. (Out)
17. Editorial Amendments.

Regulation Amendments for 2015 Final Rule

(1) Responsibility to Conduct Construction Inspections § § 192.305 and 195.204.

- PHMSA proposed to revise § 192.305 to specify that a transmission pipeline or main cannot be inspected by someone who participated in its construction.
- PHMSA has adopted language that more clearly identifies the types of individuals who should be excluded from the required inspections, (*i.e.,* the individual who performed the construction task that requires inspection).

Regulation Amendments for 2015 Final Rule

(1) Responsibility to Conduct Construction Inspections § § 192.305 and 195.204.

- PHMSA believes that allowing individuals to inspect their own work defeats, in part, the measure of safety garnered from such inspections.
- PHMSA was **not intending** to require third party inspections or **attempting to prohibit** any person from a company to inspect the work of another person from the same company.

Regulation Amendments for 2015 Final Rule

(1) Responsibility to Conduct Construction Inspections § § 192.305 and 195.204.

- PHMSA proposed to revise §§ 192.305 and 195.204 **to prohibit individuals** involved in the construction of a transmission line, main or pipeline system **from inspecting his or her own work.**

Regulation Amendments for 2015 Final Rule

(2) Leak Surveys for Type B Gathering Lines § 192.9.

- PHMSA proposed that operators of Type B gathering lines must perform leak surveys in accordance with § 192.706 and fix any leaks discovered.
- PHMSA has adopted § 192.9(d)(7) as proposed with the minor modification of substituting the word “fix” with “repair.”

Regulation Amendments for 2015 Final Rule

(3) Qualifying Plastic Pipe Joiners § 192.285(c)

- PHMSA proposed to revise § 192.285 to provide greater **scheduling flexibility** and **require requalification** of a joiner if any production joint is found unacceptable.
- NAPSR commented that the **existing regulatory** language sets a **very low standard** for joiner requalification and noted that the large number of operators requesting similar waivers demonstrates that a requalification system like the one proposed in its resolution is acceptable and preferred by pipeline operators.

Regulation Amendments for 2015 Final Rule

(3) Qualifying Plastic Pipe Joiners § 192.285(c)

- Several comments from industry were against the proposal citing its restrictiveness, and lack of data.
- PHMSA does not believe the proposed requirements are as onerous as some of the commenters indicated, nor would there necessarily be a zero tolerance policy in effect as a result of the proposed changes.

Regulation Amendments for 2015 Final Rule

(3) Qualifying Plastic Pipe Joiners § 192.285(c)

- PHMSA expects some evaluation would be done following any unacceptable joint, and in some cases evaluation may be necessary on a case-by-case basis.
- PHMSA does not expect conditions beyond the control of the joiner to be used as a case to present requalifying of an individual

Regulation Amendments for 2015 Final Rule

(3) Qualifying Plastic Pipe Joiners § 192.285(c)

- The Final Rule revises § 192.285 to provide greater scheduling flexibility and require requalification of a joiner if any production joint is found unacceptable.

Regulation Amendments for 2015 Final Rule

(4) Mill Hydrostatic Tests for Pipe To Operate at Alternative Maximum Allowable Operation Pressure § 192.112

- PHMSA proposed to revise § 192.112(e) by eliminating the allowance for combining loading stresses imposed by pipe mill hydrostatic testing equipment for the mill test.
- Eliminating the allowance to combine equipment loading stresses will have the effect of increasing the internal test pressure for mill hydrostatic tests for new pipe to be operated at an alternative MAOP.

Regulation Amendments for 2015 Final Rule

(5) Regulating the Transportation of Ethanol by Pipeline § 195.2

- PHMSA proposed to modify its definition of "hazardous liquid" to include ethanol.
- In one of the comments, one of the operators suggested that the term "ethanol" and "bio-diesel petroleum" should be added to the definition of "hazardous liquid."

Regulation Amendments for 2015 Final Rule

(5) Regulating the Transportation of Ethanol by Pipeline § 195.2

- In this Final rule PHMSA has adopted the amendment to add the term “ethanol” to the definition of “hazardous liquids” in § 195.2, however “bio-diesel will not be added to this definition.

Regulation Amendments for 2015 Final Rule

(6) Limitation of Indirect Costs in State Grants § 198.13

- PHMSA proposed to incorporate the 20 percent limitation on indirect expenses into the regulations governing grants to state pipeline safety programs.
- PHMSA **has decided not to adopt** the proposal into regulation. However, PHMSA will maintain the 20 percent indirect cost cap through language in our payment agreements with states.

Regulation Amendments for 2015 Final Rule

(7) Transportation of Pipe § 192.65

- PHMSA proposed to revise the regulation to require that the rail transportation of all pipe be subject to the referenced API RP 5L1 standards.
- In addition, PHMSA is replacing the phase "**Operator may not use pipe**" with "**Operator may not install pipe**" to clearly indicate that this amendment does not apply to pipe already installed

Regulation Amendments for 2015 Final Rule

(8) Threading Copper Pipe: § 192.279

- PHMSA proposed to use “threaded copper pipe if the wall thickness is equivalent to the comparable size of Schedule 40 or heavier wall pipe as listed in Table 1 of ASME B36.10M, Standard for Welded and Seamless Wrought Steel Pipe.”

Regulation Amendments for 2015 Final Rule

(8) Threading Copper Pipe: § 192.279

- PHMSA **is unable to incorporate ASME/ANSI B36.10M**, because the law prohibits the Secretary from issuing a regulation that incorporates by reference any document unless that document is available to the public, free of charge, but removes the Internet Web site requirements.
- PHMSA will address this proposal in a future rulemaking action.

Regulation Amendments for 2015 Final Rule

(10) Calculating Pressure Reductions for Hazardous Liquid Pipeline Integrity Anomalies § 195.452(h)(4)(i)

- PHMSA sought to modify § 195.452(h)(4)(i) to provide for alternative methods of calculating a pressure reduction for immediate repair conditions caused by threats other than corrosion.
- After comments, PHMSA will amend the rule as proposed as well as require that an operator must calculate remaining strength or reduce operating pressure until a repair can be completed.

Regulation Amendments for 2015 Final Rule

(11) Testing Components Other Than Pipe Installed in Low-Pressure Gas Pipelines § § 192.503 and 192.505

- PHMSA proposed to amend §§ 192.503 and 192.505 to exempt certain components from the strength test requirement in Subpart J of Part 192.
- Lastly, although industry has asked to add an expansion list and source of standards for other components, it is out of the scope of this rulemaking.

Regulation Amendments for 2015 Final Rule

(12) Alternative MAOP Notifications § 192.620(c)(1)

- PHMSA proposed to require that for new pipelines, an operator would notify the PHMSA pipeline safety regional office of planned alternative MAOP design and operations **180 days prior** to start of **pipe manufacturing or construction activities**.
- **Final Rule**: Notification to PHMSA of new alternative MAOP pipeline project activities at **least 60 days prior** to start of pipe manufacturing or construction activities should not delay operator project activities.

Regulation Amendments for 2015 Final Rule

(13) National Pipeline Mapping System §§ 191.29, 195.61

- PHMSA proposed to **codify** the statutory requirement for the submission of the NPMS data into Parts 191 and 195.
- An NPMS submission consists of geospatial data, attribute data and metadata, public contact information, and a transmittal letter
- PHMSA encourages operators to make their submissions early beginning on January 1 of each year. In the Final Rule, PHMSA is adopting the amendment to the NPMS as proposed.

Regulation Amendments for 2015 Final Rule

(14) Welders vs. Welding Operators §§ 192.225, 192.227, 192.229, 195.214, 195.222

- PHMSA proposed to add references to additional qualification standards in API Std 1104, such as sections 12 and 13 for welders and welding operators of mechanized and automated welding equipment.
- However, upon further review, Section 13, will not be added.

Regulation Amendments for 2015 Final Rule

(14) Welders vs. Welding Operators §§ 192.225, 192.227, 192.229, 195.214, 195.222

- The Final Rule allows welds to be evaluated to API Std 1104, section 9 or Appendix A, and **eliminates the requirement** that the weld be first evaluated to section 9, before using Appendix A.

Regulation Amendments for 2015 Final Rule

(15) Components Fabricated by Welding § 192.153

- An operator must specify the correct test pressure when placing an order for an ASME vessel to ensure it is designed and tested to the requirements of 49 CFR part 192.
- Unless a vessel is specially ordered with a test pressure of 1.5 times MAOP as prescribed by the purchaser, the vessel will be tested in accordance with the standard test factor of 1.3.

Regulation Amendments for 2015 Final Rule

- **(15) Components Fabricated by Welding § 192.153**
  - ❖If the vessel is not tested to 1.5 times the MAOP, it cannot be used in a compressor or meter station, or other Class 3 or Class 4 locations.
  - ❖Under the proposal, all ASME pressure vessels subject to § 192.153 and § 192.165(b)(3) would be designed and tested at a pressure that is 1.5 times the MAOP, in lieu of the standard ASME BPVC, section VIII test pressure of 1.3 times the MAOP. Additionally, PHMSA proposed to revise § 192.165(b)(3) reference to this requirement.

Regulation Amendments for 2015 Final Rule

(16) Odorization of Gas Transmission Lateral Lines § 192.625

- GPAC members found it difficult to agree on how to calculate the 50 percent of a lateral line between the distribution center and the first upstream connection to the transmission line.
- Proposal requires further analysis, and will be revisited in future rulemaking action.

Editorial Amendments

- In section 192.3 we proposed to add the definition of “**Welder**” and “**Welding Operator**.
- In § 195.2, we proposed to revise the definitions of “alarm” and “hazardous liquid.”
- PHMSA does not wish to be notified about hazardous liquid pipeline facility construction with a cost of less than ten million dollars, so § 195.64(c)(1)(iii) is being deleted.

Editorial Amendments

- The NPRM proposed to remove the requirement to **file offshore pipeline condition reports currently found in §§ 191.27 and 195.57.** This Final Rule completes the removal and changes §§ 191.7 and 195.58 by removing the reference to offshore pipeline condition reports.

Editorial Amendments

Safety-Related Condition Report

- Sections 191.25 and 195.56 include the method for submitting safety-related condition reports.
- The regulations currently require submittal by facsimile and do not provide an option for electronically mailing the report to PHMSA.
- In this Final Rule, these regulations are revised to allow submittal of reports by electronic mail.

IBR listed in the Final Rule

- American Petroleum Institute's (API), API Specification 5L, “Specification for Line Pipe,” (API Spec 5L). 45 edition – Incorporated by Reference on January 5, 2015 – Mill test
- ASME Boiler & Pressure Vessel Code, section VIII Rules for Construction of Pressure Vessels
- API Standard 1104, “Welding of the ASME Pipelines and Related Facilities and Appendix A
- API RP 5L1

Notice

Notice

Random Drug Testing Rate, Contractor Management Information System Reporting, and Obtaining Drug and Alcohol Management Information System Sign-In Information

- PHMSA has determined that the minimum random drug testing rate for covered employees will remain at 25 percent during calendar year 2015.
- Operators are reminded that drug and alcohol testing information must be submitted for contractors performing or ready to perform covered functions.

Notice

Random Drug Testing Rate, Contractor Management Information System Reporting, and Obtaining Drug and Alcohol Management Information System Sign-In Information

- For calendar year 2014 reporting, PHMSA will not attempt to mail the “user name” and “password” for the Drug and Alcohol Management Information System (DAMIS) to operators, but will be available in the PHMSA Portal (https://portal.phmsa.dot.gov/pipeline).

Notice

- **Public workshop on Managing Pipeline Cracking Challenges** was held on Tuesday August 5, 2014 from 9:00 am to 5:00 pm. The following agenda was discussed:
  - ❖Criteria for determining when a probable crack defect in a pipeline segment must be excavated,
  - ❖The time limits for completing those excavations and models for determining crack growth rates.
  - ❖The state-of-the-art of crack detection in hazardous liquid and natural gas pipelines.

Notice

- **Public workshop on Managing Pipeline Cracking Challenges** was held on Tuesday August 5, 2014 from 9:00 am to 5:00 pm. The following agenda was discussed:
  - ❖Perspectives on the challenges involved with detecting and characterizing crack like defects, including environmentally assisted cracks and cracks with corrosion, will be provided from pipeline operators and regulators.

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Questions??